

Name: _____

Class: _____

Date: _____

ID: A

Geometry Unit 1 Practice Test**Multiple Choice***Identify the choice that best completes the statement or answers the question.*

- _____ 1. Evaluate the expression $3(4a - 5) - b$ for $a = 6$ and $b = -3$.
- | | | | |
|---|----|---|----|
| A | 54 | C | 64 |
| B | 60 | D | 70 |

- _____ 2. Evaluate $|3 - r|$ for $r = 10$.
- | | | | |
|---|-----|---|----|
| F | -13 | H | 7 |
| G | -7 | J | 13 |

- _____ 3. In which quadrant is the coordinate pair $(-11, 1)$ located?
- | | | | |
|---|----|---|-----|
| A | I | C | III |
| B | II | D | IV |

- _____ 4. Solve the equation $\frac{m}{-3} + 5 = 1$.
- | | | | |
|---|-----|---|----|
| F | -18 | H | 2 |
| G | -2 | J | 12 |

- _____ 5. Solve the inequality $-7 \leq 2x + 9$.
- | | | | |
|---|-------------|---|-------------|
| A | $x \leq -1$ | C | $x \geq -8$ |
| B | $x \leq 1$ | D | $x \geq 8$ |

- _____ 6. Evaluate d^3 for $d = -5$.
- | | | | |
|---|------|---|-----|
| F | -243 | H | -75 |
| G | -125 | J | -15 |

_____ 7. Simplify $z^9 \cdot z^3$.

A z^3

B z^6

C z^{12}

D z^{27}

_____ 8. What is the solution to the equation $4c - 3 = 85$?

F -22

G 20.5

H 22

J 85

_____ 9. The statement “6 less than twice a number is at least 15” is represented by

A $6 - 2n \leq 15$.

B $2n - 6 \leq 15$.

C $6 - 2n \geq 15$.

D $2n - 6 \geq 15$.

_____ 10. What is the slope of the line that passes through $(-8, 2)$ and $(4, 5)$?

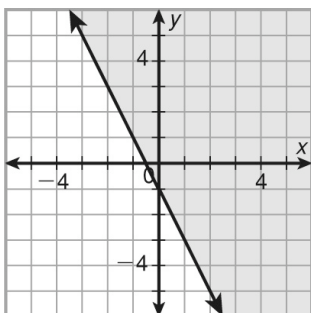
F $-\frac{7}{4}$

G $-\frac{4}{7}$

H $\frac{1}{4}$

J 4

_____ 11. Which inequality is shown by the graph?



A $y \geq -2x - 1$

B $y \leq -2x - 1$

C $y \geq -\frac{1}{2}x - 1$

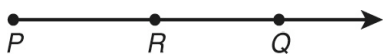
D $y \geq 2x - 1$

- _____ 12. Last year Miranda was 60 inches tall. This year she is 63 inches tall. What is the percent increase in her height?
- | | |
|--------|-------|
| F 5% | H 60% |
| G 6.3% | J 95% |

- _____ 13. What is the value of x if $\sqrt{x} = 9$?
- | | |
|-----|------|
| A 3 | C 18 |
| B 9 | D 81 |

- _____ 14. Which equation has the solutions -4 and 2 ?
- | |
|--------------------|
| F $(x+4)(x-2) = 0$ |
| G $(x-4)(x-2) = 0$ |
| H $(x+4)(x+2) = 0$ |
| J $(x-4)(x+2) = 0$ |

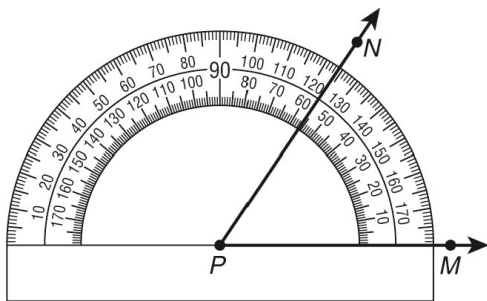
- _____ 15. Which names the longest segment in the figure?



- | | |
|--------------------|--------------------------|
| A \overline{PRQ} | C \overrightarrow{PRQ} |
| B \overline{PQ} | D \overrightarrow{PQ} |

- _____ 16. Jayna wants to construct the midpoint of \overline{CD} . She places the point of her compass on point C to swing an arc. How far should she open her compass?
- | |
|--------------------------|
| F less than half of CD |
| G more than half of CD |
| H exactly half of CD |
| J any amount |

_____ 17. What is $m\angle MPN$?



A 56°

C 124°

B 64°

D 136°

_____ 18. The ratio of the measures of two complementary angles is 3 : 7. What is the measure of the larger angle?

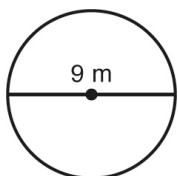
F 27°

H 63°

G 30°

J 70°

_____ 19. What is the area of the circle to the nearest square meter?



A 28 m^2

C 127 m^2

B 64 m^2

D 254 m^2

_____ 20. The area of a rectangular office is 288 square feet. One side of the office is 18 feet long. What is the perimeter of the office?

F 34 ft

H 72 ft

G 68 ft

J 88 ft

- _____ 21. T is the midpoint of \overline{RS} , T has coordinates $(6, -4)$, and S has coordinates $(3, -2)$. What are the coordinates of R ?

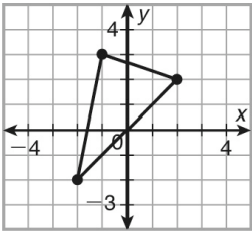
A $(9, -6)$

$$C \quad (0, 0)$$

B (15, -10)

D $(1.5, -2)$

- _____ 22. Find the perimeter of the triangle to the nearest whole unit.



F 18

H 14

G 16

J 12

- _____ 23. V has coordinates $(11, -14)$, and W has coordinates $(x, 10)$. What is the value of x if $VW = 25$?

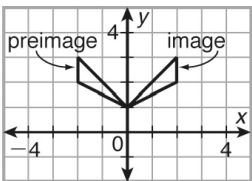
A 4 or 18

C -4 or 18

B -4 or -18

D 4 or -18

- _____ 24. Which is BEST describes the transformation?



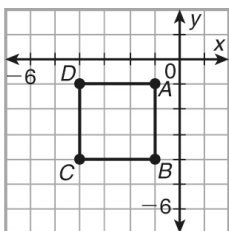
F rotation about the origin

H reflection across the x-axis

G translation $(x, y) \rightarrow (x+5, y-6)$

J reflection across the y -axis

_____ 25. In which quadrant is the image of point A after the translation $(x, y) \rightarrow (x - 8, y + 7)$?



A I
B II

C III
D IV

Geometry Unit 1 Practice Test Answer Section

MULTIPLE CHOICE

- | | | | |
|--------------------------|--------|--------|---------------------------------|
| 1. ANS: B
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 2. ANS: H
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 3. ANS: B
MSC: DOK 1 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 4. ANS: J
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 5. ANS: C
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 6. ANS: G
MSC: DOK 1 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 7. ANS: C
MSC: DOK 1 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 8. ANS: H
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 9. ANS: D
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 10. ANS: H
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 11. ANS: A
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 12. ANS: F
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 13. ANS: D
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 14. ANS: F
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 15. ANS: B
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 16. ANS: G
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 17. ANS: A
MSC: DOK 1 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 18. ANS: H
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 19. ANS: B
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 20. ANS: G
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |
| 21. ANS: A
MSC: DOK 2 | PTS: 1 | DIF: 2 | TOP: Cumulative Test, Chapter 1 |

22. ANS: H PTS: 1 DIF: 2 NAT: NT.CCSS.MTH.10.9-12.G.GPE.7
TOP: Cumulative Test, Chapter 1 MSC: DOK 2
23. ANS: A PTS: 1 DIF: 2 TOP: Cumulative Test, Chapter 1
MSC: DOK 2
24. ANS: J PTS: 1 DIF: 2 TOP: Cumulative Test, Chapter 1
MSC: DOK 2
25. ANS: B PTS: 1 DIF: 2 TOP: Cumulative Test, Chapter 1
MSC: DOK 2